



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/330,262	06/11/1999	JOHAN THEVELEIN	6-1032-041	9212

803            7590            12/17/2002  
HENDERSON & STURM LLP  
1213 MIDLAND BUILDING  
206 SIXTH AVENUE  
DES MOINES, IA 50309-4076

[REDACTED] EXAMINER

LOEB, BRONWEN

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

1636

DATE MAILED: 12/17/2002

(2)

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/330,262	THEVELEIN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bronwen M. Loeb	1636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 2 Feb 2002 & 4 Oct 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-7,9,10,12,14-23,26-36,38 and 40-59 is/are pending in the application.

4a) Of the above claim(s) 26-35 is/are withdrawn from consideration.

5) Claim(s) 1-6 and 42-50 is/are allowed.

6) Claim(s) 7,9,10,12,14-23,36,38,40,41 and 51-59 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 4 Feb 2002 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input checked="" type="checkbox"/> Other: <i>See Continuation Sheet</i> .

Continuation of Attachment(s) 6). Other: Copy of Papers Originally Filed information.

*Application serial no: 09/330,262*

The following papers have not been made part of the permanent records of the United States Patent and Trademark Office (Office) for this application (37 CFR 1.52(a)) because of damage from the United States Postal Service irradiation process:

Mailroom Stamp Date

18 March 2002

Certificate of Mailing Date

8 March 2002

*Paper #11*

The above-identified papers, however, were not so damaged as to preclude the USPTO from making a legible copy of such papers. Therefore, the Office has made a copy of these papers, substituted them for the originals in the file, and stamped that copy:

**COPY OF PAPERS  
ORIGINALLY FILED**

If applicant wants to review the accuracy of the Office's copy of such papers, applicant may either inspect the application (37 CFR 1.14(d)) or may request a copy of the Office's records of such papers (*i.e.*, a copy of the copy made by the Office) from the Office of Public Records for the fee specified in 37 CFR 1.19(b)(4). Please do **not** call the Technology Center's Customer Service Center to inquire about the completeness or accuracy of Office's copy of the above-identified papers, as the Technology Center's Customer Service Center will **not** be able to provide this service.

If applicant does not consider the Office's copy of such papers to be accurate, applicant must provide a copy of the above-identified papers (except for any U.S. or foreign patent documents submitted with the above-identified papers) with a statement that such copy is a complete and accurate copy of the originally submitted documents. If applicant provides such a copy of the above-identified papers and statement within **THREE MONTHS** of the mail date of this Office action, the Office will add the original mailroom date and use the copy provided by applicant as the permanent Office record of the above-identified papers in place of the copy made by the Office. Otherwise, the Office's copy will be used as the permanent Office record of the above-identified papers (*i.e.*, the Office will use the copy of the above-identified papers made by the Office for examination and all other purposes). This three-month period is not extendable.

*Part of Paper No. 12*

### **DETAILED ACTION**

This action is in response to the amendment filed 4 February 2002 in which claims 1-, 9, 10, 12, 14-23, 36, 38, 40 and 41 were amended, claims 8, 11, 13, 24, 25, 37 and 39 were cancelled and new claims 42-59 were presented and in response to the amendment filed 4 October 2002 which provided amendments to the specification.

Claims 1-7, 9, 10, 12, 14-23, 26-36, 38 and 40-59 are pending.

#### ***Election/Restrictions***

1. Claims 26-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: the information regarding the deposits remains incomplete on p. 13, lines 1-13, p. 29, lines 15-16 and p. 58, lines 10-15.

Appropriate correction is required.

#### ***Claims Objections***

3. Claim 15 is objected to because of the following informalities: Claim 15 recites the abbreviation "C.N.C.M."; abbreviations should be defined at their first recitation in the claim set. Appropriate correction is required.
4. Claim 59 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 36. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Claim 59 is identical to claim 36 except that claim 36 recites the phrase "intended for frozen doughs". Intended use language does not add patentable distinction to a product claim unless it is shown to change the structure of the product. Absent such a demonstration, claim 59 is identical in scope to claim 36 and is therefore objected to as a duplicate.

***Response to Amendment***

5. The rejection of claims 24 and 25 under 35 USC §112, first paragraph for lack of enablement has been withdrawn in view of Applicant's amendment.

The rejection of claim 1-25 and 36-41 under 35 USC §112, second paragraph for being indefinite has been withdrawn in view of Applicant's amendment.

6. Claims 15-23 stand rejected under 35 USC §112, first paragraph for lack of enablement for reasons of record and as further discussed below.
7. New rejections are presented below.

***Response to Arguments***

8. With regard to the rejection of claims 15-23 under 35 USC §112, first paragraph for lack of enablement, Applicant's arguments have been fully considered but are deemed not persuasive.

Applicant has provided copies of the original deposit receipts and translations thereof related to the each deposit claimed and the required statement that all restrictions on the availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent for all the deposits claimed except for n° I-2031, recited in claim 15. However, the specification still lacks compliance with 37 CFR 1.809(d) which requires that for each deposit the specification contain:

- (1) The accession number for the deposit;
- (2) The date of the deposit;
- (3) A description of the deposited biological material sufficient to specifically identify it and to permit examination; and
- (4) The name and address of the depository.

The specification currently lacks the date of deposit for each deposit. Upon appropriate amendment of the specification, this rejection will be withdrawn with respect to claims 16-23. Claim 15 recites "n° I-2031" for which no deposit receipt has been provided and it is not referred to in the statement. While it is noted that the initial deposit (presumably n° I-2031) of the organism claimed in claim 15 was contaminated (see specification p. 13, lines 16-17), if this is retained in the claim, the deposit information for it must be perfected in the specification and it must be referred to in the statement.

**New Grounds of Rejection**

9. Claims 7, 9, 10, 12, 14, 36, 38, 40, 41 and 51-59 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The written description requirement is established by 35 U.S.C. §112, first paragraph which states that the: "*specification* shall contain a written description of the invention. . .[emphasis added]." The written description requirement has been well established and characterized in the case law. A specification must convey to one of skill in the art that "as of the filing date sought, [the inventor] was in possession of the invention." See *Vas Cath v. Mahurkar* 935 F.2d 1555, 1560 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). Applicant may show that he is in "possession" of the invention claimed by describing the invention with all of its claimed limitations "by such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention." See *Lockwood v. American Airlines Inc.* 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997).

This rejection is based on the Guidelines for the Examination of Patent Applications Under the 35 U.S.C. §112, first paragraph "Written Description" Requirement published in the Federal Register (Volume 66, Number 4, Pages 1099-1111). Claim 7 is drawn to an industrial yeast strain having the fil phenotype. This is a

genus claim in terms of any industrial yeast strain having the fil phenotype. Claim 57 is drawn to an industrial yeast strain having the fil phenotype obtained by the process according to claim 1 and presenting an alcohol assimilation at least equal to 50% of that of the starting strain and not producing metabolites which give a bad smell or a bad or abnormal taste to breads. This is a genus claim in terms of any industrial strain having the fil phenotype and presenting an alcohol assimilation at least equal to 50% of that of the starting strain and not producing metabolites which give a bad smell or a bad or abnormal taste to breads. The specification mentions nine strains of yeast. This disclosure is not deemed to be descriptive of the complete structure of a representative number of species encompassed by the claims as one of skill in the art cannot envision all the industrial yeast strains based on the teachings in the specification. The specification mentions only two specific genes (CYR1 also called CDC35 and YDL 035C also called GPR1) that when mutated yield the desired yeast strain (p. 28, line 13-p. 29, line 6). The specific mutation in CYR1 responsible for the desired phenotype is taught (p. 13, lines 25-29 and p. 28, line 13-26). More generally, the specification teaches a broad and non-specific range of genes expected to be relevant to developing the fil phenotype (p. 14, lines 7-24). However, with the exception of CYR1, there is no teaching of what specific mutations in what specific genes will lead to the desired fil phenotype in the yeast strains. There is no structure-function guidance correlating the sequence of any gene to the functions associated with the fil phenotype. There is no disclosure that the single specific mutation in the CYR1 gene yielding the desired fil phenotype is predictive for any other gene. Therefore, the specification does not

describe the claimed industrial yeast strains having the fil phenotype in such full, clear, concise and exact terms so as to indicate that Applicant has possession of these yeast strains at the time of filing the present application. Thus, the written description requirement has not been satisfied.

10. Claims 2, 14, 57 and 58 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is vague and indefinite in reciting "a bad smell" and "a bad or abnormal taste". These phrases refer to subjective aspects that are not defined in the specification or in the art and thus render the metes and bounds of the claims unclear.

Claim 57 is vague and indefinite in reciting "a bad smell" and "a bad or abnormal taste". These phrases refer to subjective aspects that are not defined in the specification or in the art and thus render the metes and bounds of the claims unclear.

### ***Conclusion***

Claims 1-6 and 42-50 are allowed. Claims 7, 9, 10, 12, 14-23, 36, 38, 40, 41 and 51-59 are rejected.

Certain papers related to this application may be submitted to Art Unit 1636 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). The official fax telephone numbers for the Group are (703) 308-4242 and (703) 305-3014. NOTE: If Applicant does submit a paper by fax, the original signed copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

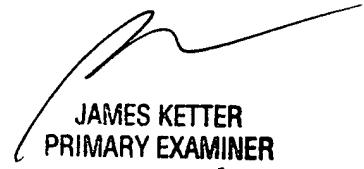
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bronwen M. Loeb whose telephone number is (703) 605-1197. The examiner can normally be reached on Monday through Friday, from 11:00 AM to 7:30 PM. A phone message left at this number will be responded to as soon as possible (usually no later than the next business day after receipt by the examiner).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel, can be reached on (703) 305-1998.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0196.

Bronwen M. Loeb, Ph.D.  
Patent Examiner  
Art Unit 1636

December 15, 2002



JAMES KETTER  
PRIMARY EXAMINER